

**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES  
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

1. (Currently amended) A compensation apparatus for prevention of damaging bearing currents in an electrical machine (DM) having at least one winding, a housing and a rotor, said apparatus comprising:  
    [[-]] a connection device ~~for connection~~ adapted to connect to at least one winding (MW), to the housing and to the rotor (RO) of the electrical machine; (DM), and  
    [[-]] a voltage production device ~~for production of~~ adapted to produce a compensation voltage ( $U_k$ ) for the rotor (RO) of the electrical machine as a function of ~~the~~ an operating voltage ( $U_d$ ) which is applied to the at least one winding (MW), of the electrical machine.
2. (Currently amended) The compensation apparatus ~~as claimed in~~ of claim 1, ~~in which the~~ wherein the operating voltage which is applied to the winding (MW) is obtained from the drive signals of a voltage intermediate-circuit converter (UR) of the electrical machine.
3. (Currently amended) The compensation apparatus ~~as claimed in~~ of claim 1 or 2, further comprising ~~in which the voltage production device has a transformer in the voltage production device, (T) whose said transformer having a~~ primary winding is connected between the at least one winding (MW) and the housing of the electrical machine (DM), and ~~whose having a~~ secondary winding is connected between the rotor (RO) and the housing of the electrical machine (DM).

4. (Currently amended) The compensation apparatus ~~as claimed in~~ of claim 3, ~~in which further comprising~~ a network ( $Z_{T1}$ ,  $Z_{T2}$ ) for adaptation of the compensation voltage, said network being is connected in parallel with the primary winding ~~or secondary winding~~.
5. (Currently amended) The compensation apparatus ~~as claimed in~~ of claim 3 ~~one of the preceding claims, in which wherein~~ the voltage production device has an active circuit (AS), ~~by means of which the~~ to produce the compensation voltage ( $U_k$ ) ~~can be produced~~ from the operating voltage ( $U_d$ ) ~~which is~~ applied to the electrical machine.
6. (Currently amended) The compensation apparatus ~~as claimed in one of the preceding claims, which has~~ of claim 1, further comprising a star circuit adapted to connect ~~by means of which the~~ phases of the electrical machine ~~are connected~~ at a star point; ( $SP$ ), and ~~in which the~~ a star point voltage ( $U_o$ ) at the star point, said star point being connected to provide the star point voltage ( $SP$ ) ~~is used~~ as an input voltage for the voltage production device.
7. (Currently amended) An electrical machine having a compensation apparatus ~~as claimed in one of claims 1 to 6~~ for prevention of damaging bearing currents in an electrical machine, said compensation apparatus comprising:
  - a connection device adapted to connect to at least one winding, to the housing and to the rotor of the electrical machine; and
  - a voltage production device adapted to produce a compensation voltage for the rotor of the electrical machine as a function of an operating voltage applied to the at least one winding of the electrical machine.
8. (Currently amended) The electrical machine ~~as claimed in~~ of claim 7, ~~which is constructed as~~ a three-phase electrical machine.

9. (Currently amended) The electrical machine ~~as claimed in~~ of claim 7 ~~or 8~~, further comprising a star circuit adapted to connect in which the windings ~~(MW)~~ winding of the electrical machine ~~(DM)~~ are connected at a star point; ~~(SP)~~, and the a star point voltage ( $U_e$ ) at the star point, said star point being connected to provide the star point voltage (SP) ~~is used~~ as an input voltage for the voltage production device.
10. (Currently amended) A method for ~~compensation for~~ compensating bearing currents in an electrical machine ~~(DM)~~ by, comprising the steps of:  
    ~~[[ - ]]~~ production of producing a compensation voltage ( $U_k$ ) for the a rotor ~~(RO)~~ of the electrical machine ~~(DM)~~ as a function of an operating voltage ( $U_d$ ) of the electrical machine, and  
    ~~[[ - ]]~~ application of applying the compensation voltage ( $U_k$ ) to the rotor ~~(RO)~~ of the electrical machine.
11. (Currently amended) The method ~~as claimed in~~ of claim 10, ~~in which~~ wherein the compensation voltage ( $U_k$ ) is produced by a transformer (T) which transforms ~~the a~~ a primary voltage ~~[[ ( which is ) ]]~~ applied to at least one ~~of the~~ windings ~~(MW)~~ winding of the electrical machine ~~(DM)~~ for the compensation voltage ( $U_k$ ).
12. (Currently amended) The method ~~as claimed in~~ of claim 10, ~~in which~~ wherein the compensation voltage ( $U_k$ ) is produced by an active circuit (AS).
13. (Currently amended) The method ~~as claimed in one of claims~~ claim 10 ~~to 12~~, ~~in which~~ wherein the operating voltage ( $U_d$ ) of the electrical machine is a common-mode voltage.
14. (Currently amended) The method ~~as claimed in one of claims~~ claim 10 ~~to 13~~, ~~in which~~ wherein the electrical machine is operated with three phases.

15. (Currently amended) The method ~~as claimed in~~ of claim 14, ~~in which wherein~~  
the windings (~~MW~~) of the electrical machine (~~DM~~) are interconnected at a star  
point (~~SP, SP'~~), and the voltage at the star point (~~SP, SP'~~) is used to produce  
the compensation voltage ( $U_k$ ).
16. (Currently amended) A compensation apparatus for prevention of damaging  
bearing currents ~~having, comprising:~~
- [[~~-~~]] a first connection ~~for connection~~ adapted to be connected to ~~the a~~  
rotor (~~RO~~) of an electrical machine; (~~DM~~);
  - [[~~-~~]] a second connection ~~for connection~~ adapted to be connected to ~~the~~  
a housing or a potential of a voltage intermediate circuit converter (~~UR~~) of the  
electrical machine; (~~DM~~); and
  - [[~~-~~]] an impedance ~~with~~ having a DC resistance and a high frequency  
reactance which is less than ~~this said DC resistance, which impedance is~~  
said impedance being connected between the first connection and the  
second connection.
17. (Currently amended) An electrical machine having a compensation  
apparatus for prevention of damaging bearing currents in an electrical  
machine as claimed in one of claim 16, said compensation apparatus  
comprising:
- [[~~-~~]] a first connection adapted to be connected to a rotor of the electrical  
machine;
  - [[~~-~~]] a second connection adapted to be connected to a housing of the  
electrical machine; and
  - [[~~-~~]] an impedance having a DC resistance and a high frequency  
reactance which is less than the DC resistance, said impedance being  
connected between the first connection and the second connection.

18. (New) The compensation apparatus of claim 3, further comprising a network, connected in parallel with the secondary winding, for adaptation of the compensation voltage.
19. (New) The electrical machine of claim 7, wherein the operating voltage applied to the winding is obtained from drive signals of a voltage intermediate-circuit converter of the electrical machine.
20. (New) The electrical machine of claim 7, wherein the compensation apparatus includes a transformer in the voltage production device, said transformer having a primary winding connected between the at least one winding and the housing of the electrical machine, and having a secondary winding connected between the rotor and the housing of the electrical machine.
21. (New) The electrical machine of claim 20, wherein the compensation apparatus includes a network, connected in parallel with the primary winding, for adaptation of the compensation voltage.
22. (New) The electrical machine of claim 20, wherein the compensation apparatus includes a network, connected in parallel with the secondary winding, for adaptation of said compensation voltage.
23. (New) The electrical machine of claim 7, wherein the compensation apparatus includes an active circuit in the voltage production device, said active circuit being adapted to produce the compensation voltage from the operating voltage applied to the electrical machine.

24. (New) The electrical machine of claim 7, wherein the compensation apparatus includes a star circuit adapted to connect phases of the electrical machine at a star point, and a star point voltage at the star point, said star point being connected to provide the star point voltage as an input voltage for the voltage production device.
25. (New) A compensation apparatus for prevention of damaging bearing currents in an electrical machine, comprising:
- a first connection adapted to be connected to a rotor of an electrical machine;
  - a second connection adapted to be connected to a potential of a voltage intermediate-circuit converter of the electrical machine; and
  - an impedance having a DC resistance and a high frequency reactance that is less than said DC resistance, said impedance being connected between said first connection and said second connection.
26. (New) An electrical machine having a compensation apparatus for prevention of damaging bearing currents in an electrical machine, said compensation apparatus comprising:
- a first connection adapted to be connected to a rotor of the electrical machine;
  - a second connection adapted to be connected to a potential of a voltage intermediate-circuit converter of the electrical machine; and
  - an impedance having a DC resistance and a high frequency reactance that is less than said DC resistance, said impedance being connected between said first connection and said second connection.